

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for coloring a composition of matter comprising:
preparing a color nanopigment comprising two or more metals,
wherein the color nanopigment exhibits at least 10% more transparency than coarse color pigment of substantially same composition with at least 1 micrometer mean particle size;
wherein the transparency is measured at a wavelength between 300 nanometers and 800 nanometers;
combining the color nanopigment and the composition of matter; ~~and~~
wherein the nanopigment is multifunctional and provides color while simultaneously enhancing non-optical performance of the composition of matter;
wherein the domain size of the color nanopigment is less than 100 nanometers; and
wherein the composition of matter comprises an article that is not a coating.
2. (Original) The method of claim 1, wherein the composition of matter comprises plastic.
3. (Original) The method of claim 1, wherein the composition of matter comprises ceramic.
4. (Original) The method of claim 1, wherein the composition of matter comprises cement.
5. (Original) The method of claim 1, wherein the composition of matter comprises glass.
6. (Original) The method of claim 1, wherein the composition of matter comprises wood.

7. (Original) The method of claim 1, wherein the composition of matter comprises fibers.
8. (Currently Amended) The method of claim 1, wherein the composition of matter comprises ~~paint~~ binder.
9. (Currently Amended) The method of claim 1, wherein the composition of matter comprises ~~ink~~ rubber.
10. (Original) The method of claim 1, wherein the color nanopigment comprises at least one oxide.
11. (Original) The method of claim 1, wherein the color nanopigment comprises at least one nitride.
12. (Original) The method of claim 1, wherein the color nanopigment comprises at least one element with atomic number greater than 21.
13. (Original) The method of claim 1, wherein the color nanopigment comprises at least one organic compound.
14. (Original) The method of claim 1, further comprising heating the color nanopigment before combining the color nanopigment and the composition of matter.
15. (Canceled)
16. (Original) The method of claim 1, wherein the combining comprises bonding the color nanopigment and composition of matter.
17. (Original) The method of claim 1, wherein the combining comprises impregnating the composition of matter with the color nanopigment.
18. (Original) The method of claim 1, wherein the combining comprises mixing the color nanopigment and composition of matter.
19. (Original) The method of claim 1, wherein the color nanopigment has an average packing number less than 1000.

20. (Original) The method of claim 1, wherein the color nanopigment comprises at least one inorganic compound.

21. (Previously Presented) The method of claim 1, wherein the non-optical performance is selected from the group consisting of enhanced modulus, hardness and toughness.

22. (Previously Presented) The method of claim 1, wherein the non-optical performance is selected from the group consisting of thermal insulation, corrosion resistance, fire resistance and anti-microbial activity.

23. (New) The method of claim 21, wherein the non-optical performance comprises enhanced modulus.

24. (New) The method of claim 21, wherein the non-optical performance comprises enhanced hardness.

25. (New) The method of claim 21, wherein the non-optical performance comprises enhanced toughness.

26. (New) The method of claim 22, wherein the non-optical performance comprises thermal insulation.

27. (New) The method of claim 22, wherein the non-optical performance comprises corrosion resistance.

28. (New) The method of claim 22, wherein the non-optical performance comprises anti-microbial activity.

29. (New) The method of claim 1, wherein at least one of the two or more metals comprises cerium and the color comprises yellow.

30. (New) The method of claim 1, wherein at least one of the two or more metals comprises praseodymium-doped cerium and the color comprises buff to red.

31. (New) The method of claim 1, wherein at least two of the two or more metals comprise tungsten and tin and the color comprises blue.

32. (New) The method of claim 1, wherein at least one of the two or more metals comprises bismuth and the color comprises yellow.

33. (New) The method of claim 1, wherein at least three of the two or more metals comprise nickel, calcium, and aluminum and the color comprises greenish.

34. (New) The method of claim 1, wherein at least three of the two or more metals comprise zinc, copper, and iron and the color comprises brownish.

35. (New) The method of claim 1, wherein at least two of the two or more metals comprise manganese and iron and the color comprises black.

36. (New) The method of claim 1, wherein at least one of the two or more metals comprises cerium boride and the color comprises grey.

37. (New) The method of claim 1, wherein at least two of the two or more metals comprise cobalt and aluminum and the color comprises dark blue.

38. (New) The method of claim 1, wherein at least one of the two or more metals comprises neodymium and the color comprises light blue.

39. (New) The method of claim 1, wherein at least one of the two or more metals comprises terbium and the color comprises brownish.

40. (New) The method of claim 1, wherein the domain size of the color nanopigment is less than $1/10^{\text{th}}$ of the specific color wavelength.